

LOCKHEED AIRCRAFT CORPORATION		ENGINEERING STUDY <input type="checkbox"/>		LAC - 198						
		CHANGE PROPOSAL <input checked="" type="checkbox"/>								
DATE 1 October 1964		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>						
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL : REPLACE SYSTEM 9 WITH SYSTEM 9B AND SYSTEM 12 WITH SYSTEM 12 <sup>B</sup> <sub>1/2</sub>										
NATURE OF PROPOSAL :  See Page 2										
REASON FOR PROPOSAL :  See Page 3										
ES	ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED :									
CP	ESTIMATED COST FOR KITS OR PARTS : See Page 4 ADDITIONAL FUNDING REQUIRED : None (SP-1923)									
ITEMS AFFECTED BY PROPOSAL :										
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD						Factory Installed				
SOURCE OF PARTS FOR KIT LAC & GFAE						AVAILABILITY - WEEKS AFTER APPROVAL See Page 4				
DISPOSITION OF SPARES AFFECTED GFE items only - All components of System 9 and System 12. ILLEGIB										
INITIATED BY : Approved For Release 2002/08/21 : CIA-RDP89B00980R000200170007-8										
APPROVED : PROJECT										

NATURE OF PROPOSAL:A. SYSTEM 12 <sup>B</sup>1 1/2 INSTALLATION

1. Add three (3) receiving "X" Band antennas, crystal detectors and pre-amplifiers in the nose; all components to be GFE.
2. Add one (1) receiving "X" Band antenna, crystal detector and pre-amplifier in the tail; all components to be GFE.
3. Replace the existing System 12 antenna and amplifier in the lower nose with System 12 <sup>B</sup>1 1/2 units. The System 12 ~~H~~2 units will fit within the existing space envelope and use the existing flush antenna window.
4. Delete the System 12 Hi-voltage power supply in the cockpit.
5. Replace the existing System 12 indicator in the cockpit with a System 12 <sup>B</sup>1 1/2 indicator (GFE).
6. Replace the existing System 12 wiring with completely new harnesses.

## B. SYSTEM 9B INSTALLATION

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1. Install a new System 9B  (GFE) on top of the aft fuselage. The existing ARS fairing will be extended aft to the vertical fin to accommodate the new box. The section of fairing which will house the new box will be pressurized by a line "Tee'd" into the existing line between the Q-Bay and 180L-3 tuner pressure box in the upper fairing.

On non-ARS aircraft the smaller existing 180L-3 tuner fairing will be replaced with a fairing enlarged in cross section and lengthened to the fin.

2. The System 9A equipment in the tail will be removed and the drag chute provisions reinstalled.
3. Four (4) transmitting antennas (GFE) will be installed - one on each side, directly forward of the dive brake and two on the lower fuselage, pointing in the forward and aft directions. Small radomes (blisters) will be provided for the two lower antennas.

4. The four "X" Band receiving antennas (GFE), which are to be installed for the System 12 <sup>B</sup>1 1/2, will be shared by the 1 KW System 9.

5.

6. A control panel (GFE) will be installed in the cockpit.
7. Install wiring, relays, circuit breakers, etc. Hi-temp, low loss, semi-rigid, co-axial cable or waveguide will be installed for much of the receive and transmit transmission line.

STAT

Availability

The modification will be accomplished at the Contractor's facility. The GFE components, Systems 9 and 12, will be available 75 days after go-ahead.

Testing

Three flights will be required to verify proper operation of aircraft flight systems, the effect of the new radome on aircraft performance, temperatures and pressure inside the system 9B pressure box, and the temperature of aircraft structure covered by the new radome.

A recording camera and remote System 12 <sup>B</sup>/<sub>12</sub> scope will be installed in the Q-Bay to record results of the System 12 <sup>B</sup>/<sub>12</sub> operation.

The System 9B and System 12 <sup>B</sup>/<sub>12</sub> manufacturer will conduct ground tests and will furnish all test equipment to verify proper operation of these systems.

Instrumentation will be removed and the ship will be delivered to the Customer for further evaluation.

Weight & Balance

The installation will increase the Basic Weight of the aircraft by approximately twenty-five (25) pounds. When the equipment is installed for flight, the weight will then increase by seventy (70) pounds. With all the equipment installed, the ballast may be relieved by about fifteen (15) pounds.

25X1

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